

ORIGINAL

OPEN MEETING  
MEMORANDUM



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TO: THE COMMISSION

FROM: Utilities Division

DATE: December 29, 2015

RE: IN THE MATTER OF THE APPLICATION OF GARKANE ENERGY  
COOPERATIVE, INC. FOR APPROVAL OF A NET METERING TARIFF.  
(DOCKET NO. E-01891A-15-0402)

Staff hereby files as a supplement to the Memo and Order Docketed on December 29, 2015, the exhibit referenced as ("Exhibit 1"). Exhibit 1 is the proposed net metering tariff for Garkane Energy Cooperative, Inc.

Arizona Corporation Commission

DOCKETED

DEC 30 2015

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| DOCKETED BY | NA |
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Director  
Utilities Division

TMB:EMV:vsc

ORIGINATOR: Eric Van Epps

SERVICE LIST FOR: Garkane Energy Cooperative, Inc.  
DOCKET NO. E-01891A-15-0402

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# Exhibit 1

GARKANE ENERGY COOPERATIVE, INC.  
ELECTRIC SERVICE  
SCHEDULE NO. ACG33  
STATE OF ARIZONA  
NET METERING SERVICE

Approved by Decision No.: \_\_\_\_\_  
Effective: \_\_\_\_\_

**Applicability**

Applicable to "Net Metering Facility" as defined below, or applicable Arizona Corporation Commission ("Commission") Decision, where facilities of adequate capacity and the required phase and suitable voltage are adjacent to the sites served and which meet ALL of the following conditions:

1. Generator must be installed at a service receiving electric service on or adjacent to the customer's Primary Service, subject to the cooperative's service requirements. (Primary Service).
2. Generator must be incidental to the Primary Service, installed on the customer's premises, and used to supply some or all of the customer's loads.
3. Generator capacity shall not be more than 125% of the Net Metering customer's total connected load as determined by the following:
  - a. For customers with a demand history it will be 125% of the highest demand in the most current 12 month period.
  - b. In the absence of demand data (for residential and small business) the highest 12 months (Calendar Year) kWh consumption in the previous three years will be divided by 2190 (to determine the 100% capacity level in kW which will achieve a "net zero" home or business) and multiplied by 125%.

**Interconnection**

A customer that installs a Net Metering Facility is not required to take service under this Tariff, but still must comply with the Cooperative's interconnection standards, including, but not limited to, the following:

1. Generator must have a maximum output of less than 10% of the nearest source side primary voltage protective device, and must be less than 80% of the installed transformer capacity at the Primary Service.
2. The maximum aggregate generation on a distribution feeder, including the proposed generation, must not exceed 15% of the maximum load on the feeder, as measured at the substation.
3. Generator must have the same output voltage and phasing as the Primary Service.
4. Generator must be a fuel cell or other renewable energy powered generator controlled by an inverter which has been designed, tested, and UL certified to UL1741 and IEEE1547 standards; or CHP with appropriate standards and certifications.
5. Generator must have positive "anti-islanding" capability per UL1741.
6. Generator must have output voltage with less than 1% Total Harmonic Distortion (THD), current output with less than 2% THD, and be operated with a 1.0 to .95% lagging Power Factor. Leading power factor operation will not be permitted.

**GARKANE ENERGY COOPERATIVE, INC.**  
**ELECTRIC SERVICE**  
**SCHEDULE NO. ACG33**  
**STATE OF ARIZONA**  
**NET METERING SERVICE**

7. Generator must be provided with a "Visible Disconnect Switch" per NESC requirements, which can be padlocked in the OPEN position and is accessible to Garkane personnel at all times. Disconnect must be permanently and visibly marked as "GENERATOR DISCONNECT" in letters at least 2" high.
8. The electrical function, operation, or capacity of a customer generation system, at the point of connection to the Cooperative's distribution system, may not compromise the quality of service to the Cooperative's other customers.

**Metering**

Service under this schedule will require the installation of a meter capable of registering and accumulating the kilowatt-hours (kWh) of electricity flowing in both directions in each billing period prior to the initiation of service.

**Billing**

**A. During the billing period for:**

**1. Customer Purchases in excess of Customer Supply**

Cooperative shall bill the customer for the net kWh supplied by the Cooperative in accordance with the Cooperative's applicable Standard Retail Rate Schedule.

**2. Customer Supply in excess of Customer Purchases (Excess Generation)**

Cooperative shall credit the customer the Excess Generation kWh in subsequent billing periods to reduce the kWh supplied (not kW or kVa demand or customer charges).

**B. For customers taking service under time-of-use rates, Customer Supply and Customer Purchases will be segmented by on-peak and off-peak periods. Excess Generation kWh credits will be applied to the time-of-use periods in which the kWh were generated by the customer.**

**C. Basic Service Charges and Demand Charges (either metered or contract) and all other elements of the Cooperative's applicable Standard Retail Rate Schedule (e.g., the temporary discontinuation of service and wholesale power cost adjustment provisions) will continue to apply in full.**

**D. For the billing each April or for the last billing period at the time the customer discontinues taking service under this rate schedule:**

The Cooperative shall issue a billing credit to the customer for any remaining Excess Generation balance. In the event the customer's electric service is terminated, after applying a billing credit for any Excess Generation up to the amount the customers owe the Cooperative, the Cooperative shall issue a check for the remaining value of the Excess Generation balance. The payment or credit will be determined at the Cooperative's Annual Average Avoided Cost, which shall be updated annually and is as specified below:

Annual Purchase Rate (¢/kWh): 2.60¢

Any payment for Firm Power will be pursuant to a separate contract.

GARKANE ENERGY COOPERATIVE, INC.  
ELECTRIC SERVICE  
SCHEDULE NO. ACG33  
STATE OF ARIZONA  
**NET METERING SERVICE**

- E. An Administrative Charge may be charged by the Cooperative to collect new or additional costs the Cooperative incurs associated with the provision of Net Metering service (such as additional data communication access and billing costs) upon filing with and approval of such charge by the Arizona Corporation Commission pursuant to A.A.C. R14-2-2305.

**Contract Period**

Any applicable contract period(s) will be set forth in an Agreement between the customer and the Cooperative.

**Definitions**

Definitions below and contained in A.A.C. R14-2-2302 (some of which are set forth below) apply to Net Metering offered under this Tariff.

1. **Annual Average Avoided Cost** ("AAAC") means the average annual wholesale fuel and energy costs per kWh charged by the Cooperative's wholesale power supplier(s) during the calendar year, determined based upon the Cooperative's audited financial statement for the applicable Calendar Year. The Cooperative will submit an updated Net Metering Service Tariff to the ACC no later than July 15 each year for approval of the Annual Average Avoided Cost. The current avoided kWh cost, once approved by the ACC, will be available at every Cooperative office and will continue in effect until the next AAAC is effective, which shall be December 1st following the annual filing of an updated Net Metering Service Tariff, unless suspended or otherwise ordered by the Commission, prior thereto.
2. **BASE RATE** means the rates applicable under the customer's currently effective standard rate schedule and any appropriate rider/adjustor/surcharge schedules.
3. **Calendar Year** means January 1 through December 31, for the purpose of determining the billing credit for the balance of any credit due in excess of amounts owed by the customer to the Cooperative.
4. **Combined Heat and Power** or **CHP** means a system that generates electricity and useful thermal energy in a single, integrated system such that the useful power output of the facility plus one-half the useful thermal energy output during any 12-month period must be no less than 42.5% of the total energy input of fuel to the facility.
5. **Customer Supply** means energy (kWh) from a customer-owned Net Metering Facility that exceeds the customer's load at a point in time and is fed back into the Cooperative's electric system, as metered by the Cooperative.
6. **Customer Purchase** means energy (kWh) that is provided from the Cooperative to the customer to serve the load that is not being served by a customer-owned Net Metering Facility, as metered by the Cooperative.
7. **Excess Generation** means the Customer Supply (kWh) less the Customer Purchase (kWh) over a monthly billing period. For time-of-use rates the Excess Generation corresponding

GARKANE ENERGY COOPERATIVE, INC.  
ELECTRIC SERVICE  
SCHEDULE NO. ACG33  
STATE OF ARIZONA  
NET METERING SERVICE

to the on- and off-peak periods is computed for on-peak and off-peak periods over the monthly billing period. (Not to be less than zero.)

8. **Firm Power** means power available, upon demand, at all times (except for forced outages) during the Contract Period from the customer's facilities with an expected or demonstrated reliability which is greater than or equal to the average reliability of the Cooperative's firm power sources.
9. **Fuel Cell** means a device that converts the chemical energy of a fuel directly into electricity without intermediate combustion or thermal cycles. The source of the chemical reaction must be from Renewable Resources.
10. **Net Metering Facility** means a facility for the production of electricity that:
  - a. Is operated by or on behalf of the customer and is located on the customer's premises;
  - b. Is intended to provide part or all of the customer's requirements for electricity;
  - c. Uses Renewable Resources, a Fuel Cell or CHP to generate electricity;
  - d. Has a generating capacity less than or equal to 125% of the customer's total connected load, or in the absence of customer load data, capacity less than or equal to the customer's electric service drop capacity; and
  - e. Is interconnected with and can operate in parallel with the Cooperative's existing distribution system.
11. **Partial Requirements Service** means electric service provided to a customer that has an interconnected Net Metering Facility whereby the output from its electric generator(s) first supplies its own electric requirements and any excess energy (over and above its own requirements at any point in time) is then provided by the Cooperative. The Cooperative supplies the customer's supplemental electrical requirements (those not met by their own generation facilities). This configuration may also be referred to as the "parallel mode" of operation.
12. **Renewable Resource** means natural resources that can be replenished by natural processes, including biomass, biogas, geothermal, hydroelectric, solar or wind as defined in A.A.C. R14-2-2302.
13. **Standard Retail Rate Schedule** means any of the Cooperative's retail rate schedules with metered kWh charges.
14. **Time Periods** – Mountain Standard Time shall be used in the application of this rate schedule. Because of potential differences of the timing devices, there may be some variation in the timing for the pricing periods. In most instances the variation should not exceed 15 minutes. On-peak and off-peak time periods will be determined by the applicable Standard Retail Rate Schedule.

ELECTRIC SERVICE REGULATIONS: Service under this schedule will be in accordance with the above conditions and the Electric Service Agreement between the customer and the Cooperative. The Electric Service Regulations of the Cooperative on file with and approved by the Arizona Corporation

GARKANE ENERGY COOPERATIVE, INC.  
ELECTRIC SERVICE  
SCHEDULE NO. ACG33  
STATE OF ARIZONA  
**NET METERING SERVICE**

Commission, including future applicable amendments, will be considered as forming a part of and incorporated in said Agreement.

TERMS OF PAYMENT: Credits due under this account will be credited to the Primary Service Account.